I2 2. (Amended) A device according to claim 1, wherein said semiconductor layer comprises hydrogen doped silicon.

I3 4. (Amended) A device according to claim 1, wherein said light sensor region comprises at least two semiconductor regions having different electrical properties and forming a junction.

I4 5. (Amended) A device for sensing a light comprising a photoelectric conversion semiconductor device, an n-channel thin film transistor, and a p-channel thin film transistor over an insulating substrate having a blocking layer, the device produced by a process comprising the steps of:

forming the blocking layer on the insulating substrate;

depositing a semiconductor layer on the blocking layer;

forming at least first, second, and third semiconductor islands by patterning the semiconductor layer;

forming first, second, and third conductive layers over the first, second, and third semiconductor islands with an insulating film interposed therebetween, respectively;

adding p-type impurities to the first semiconductor island and a first portion of the third semiconductor island by using the first and third conductive layers as masks; and

adding n-type impurities to the second semiconductor island and a second portion of the third semiconductor island by using the second and third conductive layers as masks.

I5 6. (Amended) A device according to claim 1, wherein the semiconductor layer has lattice distortion and the peak of a laser Raman spectrum of the semiconductor layer is shifted to a lower wave number than $520cm^{-1}$.

7. (Amended) A device according to claim 5, wherein the semiconductor layer has lattice distortion and the peak of a laser Raman spectrum of the semiconductor layer is shifted to a lower wave number than $520cm^{-1}$.

8. (Amended) A device for sensing a light comprising:

a light sensor region and a semiconductor switch region adjacent to and operatively connected with said light sensor region over an insulating substrate having a blocking layer,

wherein a semiconductor region of the light sensor region and an active region of the semiconductor switch region comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein said semiconductor layer has at least one of and electron mobility in a range of 15 to 300 $cm^2/Vsec$ and a hole mobility in a range of 10 to 200 $cm^2/Vsec$.

9. (Amended) A device for sensing a light comprising:

a light sensor region and n-type and p-type semiconductor switch regions adjacent to and operatively connected with said light sensor region over an insulating substrate having a blocking layer,

wherein a semiconductor region of the light sensor region and active regions of the n-type and p-type semiconductor switch regions comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein a Raman spectrum of the semiconductor layer exhibits a peak deviated from that which stands for a single crystal for the semiconductor.

10. (Amended) A device according to claim 9, wherein said semiconductor layer comprises hydrogen doped silicon.

I 9

11. (Amended) A device according to claim 9, wherein said light sensor region comprises at least two semiconductor regions having different electrical properties and forming a junction.

12. (Amended) A device according to claim 11, wherein said two semiconductor regions in said light sensor region are arranged in a lateral direction on said substrate.

J3

I 10

13. (Amended) A device according to claim 9, wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 300 cm^2/Vsec and a hole mobility in a range from 10 to 200 cm^2/Vsec.

14. (Amended) A device according to claim 1, wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 300 cm^2/Vsec and a hole mobility in a range from 10 to 200 cm^2/Vsec.

J4

I 11

15. (Amended) A device for reading an image comprising:

an image sensor region and a semiconductor switch region adjacent to and operatively connected with said image sensor region over an insulating substrate having a blocking layer,

wherein a semiconductor region of the light sensor region and an active region of the semiconductor switch region comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein said semiconductor layer has a semi-amorphous structure comprising a mixture of amorphous and crystalline structures, in which a Raman spectrum of the semiconductor film exhibits a peak deviated from that which stands for a single crystal of the semiconductor.

I 12

16. (Amended) A device according to claim 15 wherein said semiconductor layer comprises hydrogen doped silicon.

17. (Amended) A device according to claim 15 wherein said semiconductor switch region comprises a thin film transistor of which the active region is formed of said semiconductor layer.

I13

18. (Amended) A device according to claim 15 wherein said image sensor region comprises at least two semiconductor regions having different electrical properties and forming a junction.

I14

19. (Amended) A device for reading an image produced by a process comprising the steps of:

forming a blocking layer on an insulating substrate;

I15

depositing a semiconductor layer on the blocking layer;

forming at least first, second, and third semiconductor islands by patterning the semiconductor layer;

forming first, second, and third conductive layers over the first, second, and third semiconductor islands with an insulating film interposed therebetween, respectively;

adding p-type impurities to the first semiconductor island and a first portion of the third semiconductor island by using the first and third conductive layers as masks; and

adding n-type impurities to the second semiconductor island and a second portion of the third semiconductor island by using the second and third conductive layers as masks,

wherein the third semiconductor islands has a p-type impurity semiconductor region adjacent an intrinsic semiconductor region and an n-type impurity semiconductor region adjacent the intrinsic semiconductor region in order in a direction perpendicular to that in which an image to be read is incident thereon.

20. (Amended) A device according to claim 15 wherein the semiconductor layer has lattice distortion and the peak of a laser Raman spectrum of the semiconductor layer is shifted to a lower wave number than $520cm^{-1}$.

I16

I16 Late JS

21. (Amended) A device according to claim 19 wherein the semiconductor layer has lattice distortion and the peak of a laser Raman spectrum of the semiconductor layer is shifted to a lower wave number than $520cm^{-1}$.

22. (Amended) A device for reading an image comprising:

an image sensor region and a semiconductor switch region adjacent to said operatively connected with said image sensor region over an insulating substrate having a blocking layer, I17

wherein a semiconductor region of the light sensor region and an active region of the semiconductor switch region comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein said semiconductor layer has at least one of an electron mobility in a range of 15 to 300 $cm^2/Vsec$ and a hole mobility in a range of 10 to 200 $cm^2/Vsec$.

Late JS

23. (Amended) A device for reading an image comprising:

an image sensor and a semiconductor switch region adjacent to and operatively connected with said image sensor region over an insulating substrate having a blocking layer, I18

wherein a semiconductor region of the light sensor region and an active region of the semiconductor switch region comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein said semiconductor layer has a semi-amorphous structure in which a Raman spectrum of the semiconductor film exhibits a peak deviated from that which stand for a single crystal of the semiconductor, and said semiconductor switch region comprises complementary p-channel and n-channel thin film transistors.

24. (Amended) A device according to claim 23 wherein said semiconductor layer comprises hydrogen doped silicon. I19

25. (Amended) A device according to claim 23 wherein said image sensor region comprises at least two semiconductor regions having different electrical properties and forming a junction.

I19

26. (Amended) A device according to claim 25 wherein said two semiconductor regions in said image sensor region are arranged in a lateral direction on said substrate.

27. (Amended) A device according to claim 23 wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 300 $cm^2/Vsec$ and a hole mobility in a range from 10 to 200 $cm^2/Vsec$.

I20

28. (Amended) A device according to claim 15 wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 300 $cm^2/Vsec$ and a hole mobility in a range from 10 to 200 $cm^2/Vsec$.

29. (Amended) A device for sensing a light comprising:

I21

a light sensor region and a semiconductor switch region adjacent to and operatively connected with said light sensor region over an insulating substrate having a blocking layer,

wherein a semiconductor region of the light sensor region and an active region of the semiconductor switch region comprise the same semiconductor layer formed on the blocking layer located on the insulating substrate, and

wherein said semiconductor layer has at least one of an electron mobility greater than 15 $cm^2/Vsec$ and a hole mobility greater than 10 $cm^2/Vsec$.

36. (Amended) A device comprising:

I22

an insulating substrate;

a blocking layer on said insulating substrate;

first, second, and third semiconductor islands on said blocking layer;

p-type impurity regions in said first semiconductor island with a first channel region interposed therebetween and in a first region of said third semiconductor island;

n-type impurity regions in said second semiconductor island with a second channel region and in a second region of said third semiconductor island;

I 22

an insulating film on said first, second, and third semiconductor islands; and

first and second gate electrodes over said first and second channel regions, respectively, with said insulating film interposed therebetween,

wherein a Raman spectrum of each of said first, second, and third semiconductor islands exhibits a peak deviated from that which stands for a single crystal of the semiconductor, and

wherein said first semiconductor island has a mobility of 10 to 300 $cm^2/Vsec$ and said second semiconductor island has a mobility of 15 to 300 $cm^2/Vsec$.